

A NEW SPECIES OF *DACNUSA* (HYMENOPTERA: BRACONIDAE) FROM SPAIN¹

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ABSTRACT: *Dacnusa rodriguezi*, a new species from Spain, is described and compared with allied species of the genus. The new species is a parasitoid of *Chromatomyia horticola* on lettuce.

The subfamily Alysiniinae is subdivided traditionally into two tribes, Alysini and Dacnusiini (Shenefelt, 1974; Wharton, 1994), whose members are endoparasitoids of cyclorrhaphous Diptera. Most of the Dacnusiini attack agromyzid hosts, and their classification and biology have been studied by Griffiths (1964, 1966, 1968, 1984) and Tobias (1986, summary of the Palearctic taxa with keys to genera and species, translated into English 1995).

The genus *Dacnusa* Haliday belongs to the latter tribe, and contains approximately 87 Holarctic species. We discovered a new species, described below, in Játiva (province of Valencia), Spain, reared from *Chromatomyia horticola* (Goureau), a species of agromyzid very common in the Comunitat Valenciana (Spain) on cultivated plants (Docavo et al., 1987).

Terms for body morphology and wing venation follow Griffiths (1964) and Wharton (1977, 1986).

Dacnusa rodriguezi, NEW SPECIES

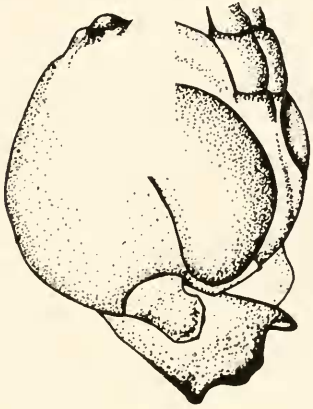
Female: Head (Figs. 1, 2, 3) - 1.78-2.0 (\bar{x} = 1.85) times wider than long, 1.34-1.57 (\bar{x} = 1.45) times higher than long; eyes in lateral view 0.7-0.9 (\bar{x} = 0.8) times as long as temples, slightly more closely approximated underneath; head width 1.79-1.95 (\bar{x} = 1.87) times distance between eyes; face fairly smooth, with fine pubescence towards sides and at centre of its foremost part; clypeus width 0.62-0.72 (\bar{x} = 0.69) times distance between eyes; antennae with 20-22 antennomeres; mandibles 3-toothed, weakly expanded, 0.28-0.39 (\bar{x} = 0.33) times length of head, with middle tooth blunt; maxillary palpi moderately long.

Mesosoma (Figs. 2, 3) - 1.21-1.32 (\bar{x} = 1.26) times longer than high, 1.63-1.90 (\bar{x} = 1.76) times longer than wide; pronotum with a median pit; mesoscutum with dorsal pit, extensively smooth, shiny, with pubescence, although longer in its posterior 2/3, covering all its surface; notauli weak; prescutellar furrow simple; precoxal suture short, weak, slightly crenulated; metapleuron with extended pubescence, towards the posterior coxa; wrinkled propodeum cov-

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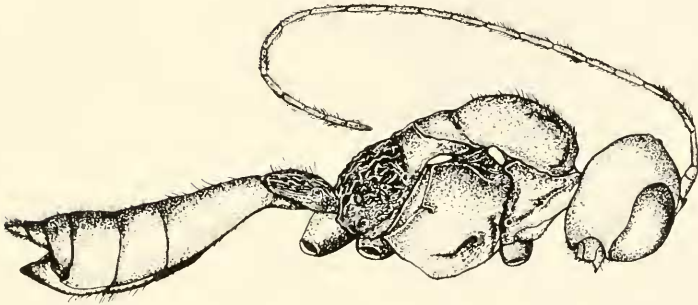
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0.5 mm

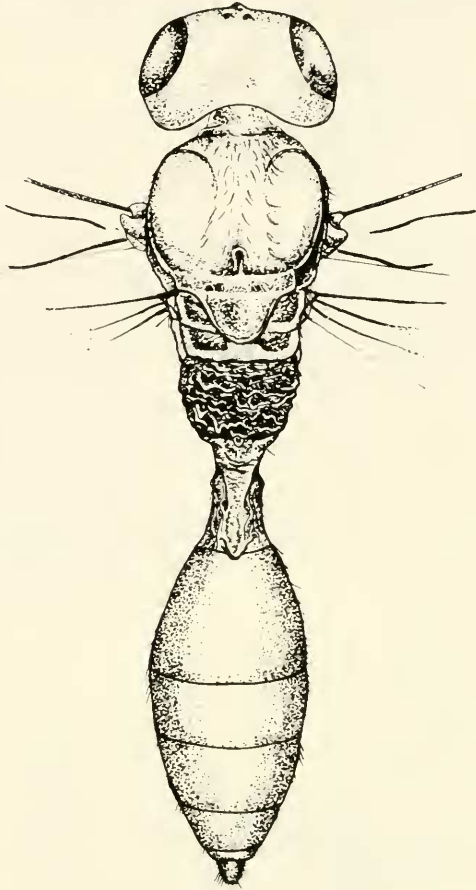
1



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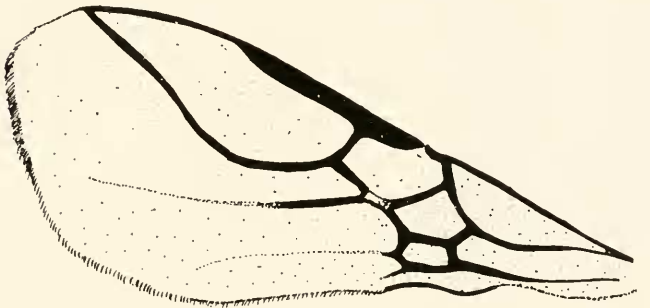
Figures 1 and 2. *Dacnusa rodriguezi* sp. nov. 1. Head in lateral view, female; 2, Body (except legs and wings) in side view, female.



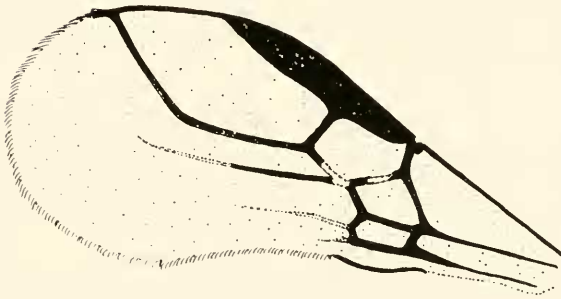
0.5 mm

3

Figure 3. *Dacnusa rodriguezii* sp. nov. Body in dorsal view, female.



a



b

0.5 mm

4

Figure 4. *Dacnusa rodriguezi* sp. nov. 4a. Anterior right wing, female. 4b. Anterior right wing, male.



0.5 mm

5

Figure 5. *Dacnusa rodriguezi* sp. nov. First tergite in dorsal view, female.

ered with fine extended pubescence; hind tarsi shorter than hind tibia.

Wings (Figs. 4a) Pterostigma moderately wide and dark, 1.8-2.0 (\bar{x} = 1.9) times longer than metacarp; $1m-cu$ distinctly antefurcal (Fig. 4); Rs sinuate.

Metasoma (Figs. 2, 3) - First tergite (Figs. 2, 3, 5) 1.3 times longer than wide apically; fairly glabrous, with a few fine setae laterally; tergite 3 smooth, without setae on its base; ovipositor sheath not extending beyond apical tergite in retracted position.

Color and size - Head, mesosoma and first tergite black; face black shiny; clypeus dark brown; labrum and palpi yellow; antennae dark brown, with yellowish brown scape, base of pedicel and annellus; centre of mandibles orange yellow; legs pale yellow, with slightly darkened tarsi; wings hyaline, with dark pterostigma; second and following tergites yellowish brown, becoming darker apically. Body length: 1.49-1.52 mm (\bar{x} = 1.50 mm).

Male: Similar to female, but pterostigma wider and dark (Fig. 4b).

Material examined (deposited in the Fundaci3n Entomol3gica "Juan de Torres Sala" (Docavo Collection) (Valencia, Spain)): SPAIN: Valencia: J3tiva, 10-VII-1988 (date host capture)/26-29-XI-1988 (emergence date of the parasitoids): Holotype, female, from puparium of *C. horticola* (host)/on *Lactuca sativa* L. (hosts food-plant). Paratypes: 4 females, 3 males, from puparia of *C. horticola* /on *L. sativa*.

Etymology: This species is dedicated to José Antonio Rodríguez Docavo as a token of appreciation for his help in many entomological excursions.

Notes: This new species is most similar to *Dacnusa austriaca* (Fischer). *D. rodriguezii* sp. nov. is distinguished mainly by: a) mandibles weakly expanded, with middle tooth blunt; b) precoxal suture present; weakly crenulated; c) pterostigma much longer than metacarp, and d) first metasomal tergite black.

This species can be identified by using the keys of Tobias (1995: 226) with the following modifications:

Males

159 (144) Antennae 22-23 segmented. Mandibles 3-toothed, not expanded. First abdominal tergite dark brownish red, 1.7 times longer than wide apically. Stigma narrower than in *D. melicerta* (Fig. 140: 8). Sternauli absent. Body 1.3 mm. Parasite of *Liriomyza dracunculi* Hering, *L. artemisicola* de Meijere. Center, Central Ural; East Germany; Austria
 *D. austriaca* Fischer

159' (144) Antennae 20-22 segmented. Mandibles weakly expanded, with middle tooth blunt. First abdominal tergite black, 1.3 times longer than wide apically. Stigma (Fig. 4b). Sternauli present. Body 1.5 mm. Parasite of *Chromatomyia horticola* (Goureau). Spain
 *D. rodriguezii* nov. sp.

Females

214 (215) Antennae 21-24 segmented. Mandibles 3-toothed, not expanded. First abdominal tergite reddish dark brown, slightly pubescent, 1.7 times longer than wide apically. Stigma yellowish dark brown, parallel-sided, few longer than metacarp. Sternauli absent. Body 1.3 mm
 *D. austriaca* Fischer

214'(215) Antennae 20-22 segmented. Mandibles weakly expanded, with middle tooth blunt. First abdominal tergite black, fairly glabrous, 1.3 times longer than wide apically. Stigma dark brown, much longer than the metacarp (Fig. 4a). Sternauli present. Body 1.5 mm
 *D. rodriguezii* nov. sp.

The remaining species of Dacnusiini that have been corroborated as parasitoids of *C. horticola* (Docavo et al., 1987, 1988, 1992; Griffiths, 1984; Spencer, 1973; Tormos et al., 1989) are: *Chorebus canariensis* Griffiths; *Ch. misellus* (Marshall); *Ch. nana* (Nixon); *Ch. sativi* (Nixon); *Dacnusa areolaris* (Nees von Esenbeck); *D. laevipectus* Thomson; *D. pubescens* (Curtis); *D. nipponica* Takada and *D. sibirica* Telenga. They can be separated from the new species described through the keys of Tobias (1995) and Fischer (1994).

Detailed information on the economic importance and the biology of *C. horticola* has been given by Spencer (1973, 1990).

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